

# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

# OPERATIONAL MEMORANDUM NO. 16

SUBJECT: PROCEDURE FOR EVALUATING PLANTWIDE APPLICABILITY

**LIMITS** 

EFFECTIVE DATE: OCTOBER 28, 1998

## **PREAMBLE**

Rule 1415 provides that a stationary source with a Clean Corporate Citizen designation may request a Plantwide Applicability Limit (PAL) for 1 or more air contaminants. A PAL is a plantwide, enforceable emission limitation (usually on a tons of emissions per 12-month rolling period basis) that covers all processes that emit the particular air contaminant. Once the PAL is established for a stationary source it serves as the benchmark for triggering the applicable Federal major modification review requirements (i.e., Prevention of Significant Deterioration (PSD) or Nonattainment New Source Review (NSR)). In other words, any subsequent physical or operational changes resulting in actual emissions that remain less than the PAL are excluded from the PSD or NSR requirements. However, ANY subsequent increase in the PAL will be treated as a major modification under those requirements. A PAL is not an exemption from any existing control technology requirements nor is it an exemption from compliance with any future applicable requirements. Hazardous Air Pollutants (HAPs) have not been included in any PALs approved up to this point. The applicability of the requirements of Section 112(g) are spelled out in 40 CFR, Part 63.

The U.S. Environmental Protection Agency (EPA) has been generally supportive of this new approach to Federal PSD/NSR applicability and has formally approved several PAL permits over the last five years. However, the EPA has yet to establish formal PAL regulations. Proposed PSD and NSR regulations were issued in 1996 and more recently, the EPA solicited comments on proposed regulations for the operating permit program which would establish the role of PALs in those permits. In the absence of any formal EPA regulations, the Air Quality Division (AQD) intends to work closely with the EPA in the development of all PALs and to seek the EPA's approval for any PAL permits issued under Rule 1415. In that context, this operational memorandum describes the Michigan Department of Environmental Quality's (MDEQ's) current approach to PAL implementation and how the interactions with EPA are to occur. However, the MDEQ cannot represent the position that the EPA will take relative to any specific approach or proposed permit. The EPA has historically reviewed and approved PALs on a case-by-case basis and that approach is expected to continue, at least until formal regulations regarding PALs have

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been issued. The AQD will review PAL proposals submitted by Clean Corporate Citizens on a case-by-case basis as well.

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The PAL permits which have been approved by EPA have specifically addressed the applicability of Federal PSD and NSR regulations. Most of these permits have included efforts to streamline the particular State's minor permit to install provisions through the advance approval of specific selected changes that would have otherwise required a review under State rules. Under Rule 1415, a PAL for a Clean Corporate Citizen may also be extended to exclude changes from the requirement to obtain a minor modification permit to install pursuant to Rul201. The MDEQ will provide "advance approval" in PAL permits for minor modifications that would be subject Rule 201. Such "advance approval" will be negotiated on a case-by-case basis. Advanced approval options range from approval of specific changes that can be anticipated and accommodated in the conditions of the permit at the time the permit is issued, to a more general approval for a wider variety of changes that only effect the air contaminants regulated by the PAL. The exact approach will depend on the needs of the applicant and their willingness to accept the responsibility for the determination of and certifying compliance with the applicable requirements that may apply to each change. Of special concern to Michigan's program is the requirement to determine that changes made under a general approval provision in a PAL permit comply with Rule 230. Compliance with Rule 230 could be accomplished in one of several ways. The Clean Corporate Citizen could model all the existing toxic air contaminant emissions at the source and compare the impacts with the screening levels for ambient impacts provided by Rule 230. In that instance, the permit might include constraints on advance approved changes which would ensure continuing compliance with the rule. Alternatively, a permit could include a selfimplementing provision that requires the Clean Corporate Citizen to model the impact of changes that would otherwise trigger Rule 230. In that instance the Clean Corporate Citizen could be authorized to make changes as long as the requirements of Rule 230 are met. Records of the analysis would be retained by the Clean Corporate Citizen and made available to the AQD.

This memorandum is designed to provide guidance to a Clean Corporate Citizen on the information requirements for a complete application for a PAL and to AQD staff on how to coordinate the evaluation of such applications with the EPA.

#### POLICY

The MDEQ, AQD will evaluate and act upon a request from a Clean Corporate Citizen for a PAL consistent with the provisions of Rule 1415. The AQD will coordinate the review of each PAL application with the EPA and will obtain EPA approval prior to issuing a PAL permit pursuant to Rule 1415.

- 1. A PAL will be established pursuant to Rule 1415(3) for a stationary source that is a Clean Corporate Citizen on a case-by-case basis. Examples of the criteria on which a PAL could be based include:
  - a. Source-wide actual emissions plus a reasonable operating margin not to exceed the definition of "significant" pursuant to Rule 119(e).

- b. Source-wide allowed emissions used in a recent permit issued pursuant to Rul@20 (nonattainment NSR), where the source-wide emissions limits represent the Lowest Achievable Emission Rate (LAER) and were completely offset.
- c. Source-wide allowed emissions used in a recent permit issued pursuant to 40 CFR 52.21 (PSD), where the source-wide emission limits represent the Best Available Control Technology (BACT) and were modeled to demonstrate compliance with the National Ambient Air Quality Standards and PSD Increments.
- d. Source-wide actual emission levels used in a recent "netting" demonstration pursuant to Rule 220 (nonattainment NSR) or 40 CFR 52.21 (PSD).
- e. Any combination of the above on a process-by-process basis.

A major consideration in proposing criteria on which a particular PAL would be based is the likelihood of EPA approval of that approach. In EPA's draft regulations for PALs, only the first two criteria were presented. However, EPA received numerous comments supporting the other criteria listed here. The AQD believes that PALs based on all of these criteria may be acceptable under appropriate circumstances and is willing to consider the specific details of a given proposal. However, it is more probable that EPA will approve a PAL proposed under the first two criteria.

- 2. Notwithstanding the definition of "major offset modification" pursuant to Rule 113 or "major modification" pursuant to the federal PSD program, the applicable requirements of Rule 220 or PSD (40 CFR 52.21) shall apply to any request for an increase in the emissions allowed under the PAL as if it were a major offset modification or major modification, respectively. Any emissions increase of volatile organic compounds will be considered an increase for ozone. The applicable requirements of Rule 220 or PSD shall apply to each air contaminant subject to regulation under the Clean Air Act for which an emissions increase above the PAL is requested. The applicable control technology requirement will apply to each emissions unit that contributes to the emissions increase above the plantwide applicability limit.
- 3. The terms and conditions of a PAL permit must retain certain of the requirements in existing permits to install. Specific conditions that will need to be retained include all past LAER and BACT determinations, all applicable state rule provisions (e.g., limits on opacity, sulfur-infuel, and toxics), and any limitation on the potential to emit of a process or the source that was created to avoid Federal NSR or PSD. With these basic limitations, the AQD will work with the Clean Corporate Citizen to simplify the conditions that are carried over to the PAL permit consistent with the opportunity provided for streamlining and equivalency provided to applicants for a Renewable Operating Permit pursuant to Rule 212(6). The Clean Corporate Citizen will be expected to address the permit history of the source in the permit application for a PAL so as to facilitate the interpretation of existing conditions in this context.
- 4. A permit which includes a PAL shall be issued in accordance with the permit content and public participation requirements of Rule 205 and shall also meet both of the following criteria:

- a. The permit shall provide that the emissions limitations and conditions established for the PAL shall not relieve the person owning or operating the stationary source of the responsibility to comply fully with any existing control technology requirements.
- b. The permit shall include specific terms and conditions that ensure the practical enforceability of the PAL. The PAL emission limitations shall be achievable through application of production processes or available methods, systems, and techniques including, but not limited to, emissions control equipment, fuel cleaning or treatment, fuel combustion techniques, substitution of less polluting materials, or limits on production that represent normal source operations. The AQD shall not be required to include in the PAL any process or process equipment for which emissions are not quantifiable or for which there are no replicable procedures to enforce the PAL.
- 5. The plan for periodic review of the PAL, required pursuant to Rulel415(4)(e) must provide that the PAL emissions limitations will be reevaluated at least every 5 years. The reevaluation will focus on the workability and enforceability of the PAL, including the adequacy of the requirements for monitoring, recordkeeping, and reporting requirements to ensure compliance with the PAL. The reevaluation will also update, as necessary, the advance approval provisions included in the PAL permit.

If the PAL has been incorporated into a renewable operating permit the periodic review shall be performed as a part of the renewal of the renewable operating permit pursuant to Rule 217(1).

- 6. A permit which includes a PAL must provide that the permit will be reopened and the PAL limits adjusted for the following reasons:
  - a. To correct a technical error made in setting the level of the PAL. Correction of a technical error could result in either an increase or decrease in the PAL limit.
  - b. To reflect any new applicable requirements. That is, a new State or Federal regulation is adopted for an air contaminant for which a PAL has been set and the source has a process that is affected by the regulation. In this instance, the PAL will be reduced by the amount that actual emissions from the source would have been reduced as a result of compliance with the rule.
  - c. To rescind or otherwise restrict the PAL as provided by Rule 1420, if the stationary source's Clean Corporate Citizen designation is terminated. If the stationary source's Clean Corporate Citizen designation is terminated, the PAL no longer serves as the benchmark for triggering the applicable Federal major modification review requirements and all advance approval provisions included in the PAL permit will be rescinded. No other terms or conditions of the permit will be effected by the loss of the Clean Corporate Citizen designation.

If the PAL has been incorporated into a renewable operating permit the reopening shall be pursuant to Rule 217(2).

- 7. The procedure to ensure that the stationary source is not modified in such a way as to exceed the PAL, required pursuant to Rule 1415(4)(f), shall include the following provisions:
  - a. Notification of the AQD of the construction and operation of any process or process equipment subject to a federal New Source Performance Standard (40 CFR 60) or a National Emission Standard for Hazardous Air Pollutants (40 CFR 63) in accordance with the applicable standard. The notification shall include all information required by the applicable standard.
  - b. Notification of the AQD at least 10-days in advance of commencement of installation, construction, reconstruction, relocation, alteration, or modification of any process or process equipment that would have a potential to emit of greater than 50% of "significant" as defined in Rule 119(e) or would have a potential to emit HAPs greater than 50% of the definition of "major source" pursuant to Section 112 of the federal Clean Air Act. Such notification is only required for a process or process equipment that would have required a permit to install if not for the PAL. The notice shall include the company name and location, the PAL permit number, a description of the equipment, the potential to emit of the equipment for each air contaminant, and any new applicable requirements.
  - c. For a PAL permit that includes provisions for general advance approvals that are not specifically addressed in the permit, a requirement that the Clean Corporate Citizen complete a prior review of any modifications to determine the applicable requirements that apply to the modification. For any modifications that increase or otherwise affect the impact of a toxic air contaminant, the applicant shall complete a prior review to ensure compliance with the requirements of Rule 230. The permit will also include provisions to ensure that adequate records are kept to ensure that these prior reviews have been performed for each modification.
- 8. The plan to ensure that changes at the stationary source allowed under the PAL do not cause or contribute to violations of the national ambient air quality standards (NAAQS), required pursuant to Rule 1415(4)(g), must include either of the following:
  - a. Minimum stack height or stack height to building height ratio requirements that would apply to any new or modified emission unit at the stationary source which will emit an air contaminant in a quantity greater than or equal to "significant" as defined by Rule 119(e); or
  - b. A permit requirement for the Clean Corporate Citizen to perform dispersion modeling, in accordance with methodology acceptable to the MDEQ, to ensure that the emissions from any new or modified emission unit at the stationary source which will emit an air contaminant in a quantity greater than or equal to "significant" as defined by Rule 119(e) will not cause or contribute to a violation of a NAAQS or applicable Prevention of

Significant Deterioration increment. Such modeling must be completed prior to commencing construction on the new or modified emission unit.

## PROCEDURE

## RESPONSIBILITIES OF THE CLEAN CORPORATE CITIZEN

The AQD strongly encourages a Clean Corporate Citizen that is interested in pursuing a PAL permit to meet with Permit Section staff early in the process of developing their PAL application. Permit Section staff will be able to advise the Clean Corporate Citizen of the advantages and disadvantages of the various PAL strategies they are considering. Permit Section staff will also be able to provide information on the latest case-by-case PAL determinations and details regarding the information that would need to be submitted to support a PAL based on a particular strategy. These meetings will result in considerable time savings for the Clean Corporate Citizen in the formal permit review process.

A Clean Corporate Citizen is responsible for submitting a complete application for a PAL. A complete application for a PAL must include all of the following information:

- 1. A completed air use permit application form (EQP 5615) and a cover letter clearly stating that the stationary source is a Clean Corporate Citizen and that the application is being submitted to request a PAL pursuant to Rule 1415. The cover letter should identify the air contaminants for which the PAL is being requested, the amount of the proposed PAL, and the basis for the proposed amount (see item 1 in the POLICY section of this Operational Memorandum).
- 2. If the PAL is proposed to be based on allowable emissions, a listing of the permits to install for all emission units at the stationary source including identification of the emission offsets provided pursuant to Rule 220 for each of those permits. [see Rule 1415(4)(c)]
- 3. A complete inventory of actual emissions, including quantifiable fugitive emissions, for all emission units at the stationary source for each air contaminant for which a PAL is being requested. If the actual emissions which reflect the normal operations of the stationary source are for a period other than the last two calendar years of operation, then the application should include a demonstration of why that time period more accurately reflects the normal operations of the stationary source. [see Rule 1415(4)(b)]
- 4. A listing of all applicable requirements for each emission unit at the stationary source for each air contaminant that a PAL is being requested. If the applicable requirement is from a permit to install, then the permit number must be included. All applicable requirements include any applicable control technology determinations (e.g., LAER determinations made pursuant to Rule 220, BACT determinations made pursuant to 40 CFR 52.21 or Rule 702, or BACT for Toxics (T-BACT) determinations made pursuant to Rule 230) and any physical or operational limits voluntarily entered by the applicant that result in avoiding such control technology determination requirements. The listing may include proposed simplifications to the applicable requirements that are carried over to the PAL permit consistent with the opportunity provided

- for streamlining and equivalency provided to applicants for a Renewable Operating Permit pursuant to Rule 212(6). [see Rule 1415(4)(a)]
- 5. A proposed monitoring, recordkeeping, and reporting plan to ensure that the PAL and any other individual applicable requirements that would be maintained within the PAL would be enforceable as a practical matter. [see Rule 1415(4)(d)]
- 6. A proposed process for periodic review and reopening of the PAL consistent with the minimum criteria listed in items 5 & 6 of the POLICY Section of this Operational Memorandum. [see Rule 1415(4)(e)]
- 7. Proposed procedures consistent with the minimum criteria listed in items 7 & 8 of the POLICY Section of this Operational Memorandum to be followed by the person owning or operating the stationary source under the PAL to ensure that changes allowed under the PAL will neither exceed the emissions caps in the PAL nor cause or contribute to violations of the NAAQS. [see Rule 1415(4)(f) & (g)]

# RESPONSIBILITIES OF AQD PERMIT SECTION STAFF

- 1. Permit Section staff will communicate PAL issues and proposals that have been discussed with Clean Corporate Citizens to the appropriate Permit staff at Region 5 of the EPA on an on-going basis. Permit Section staff will make every reasonable effort to build the consensus needed to gain approval for a feasible PAL proposal in a timely manner.
- 2. The Permit Section will screen all permit to install application submittals for admistrative completeness and log all applications into the AQD's permit to install database. This process will follow the Permit Section's "Procedure for Screening Permit to Install Application Submittals for Administrative Completeness." An administratively complete application for a PAL includes information which addresses each of items 1 to 7 in the ROCEDURE Section, RESPONSIBILITIES OF THE CLEAN CORPORATE CITIZEN of this Operational Memorandum. A copy of the application should be sent to the EPA as quickly as possible after it has been assigned to a permit reviewer.
- 3. Permit Section staff will be responsible for reviewing and proposing action on the Clean Corporate Citizen's application for a PAL. The review includes confirming that all of the information required for a complete application is technically complete and accurate, entering the relevant application information into the permit to install (Evalform) database, reviewing and negotiating proposed permit conditions with the applicant, coordinating the review with the EPA, providing for any required public notices and hearings, and producing and distributing the final permit document. Permit Section staff evaluation will consist of the following as a part of the technical review of the PAL application:
  - a. Determining that the proposed PAL limit is based on technically sound criteria, includes the complete inventory of all processes or process equipment at the stationary source that emits the PAL pollutant, and reflects the normal operation of the stationary source.

- b. Determining that the list of applicable requirements is complete and accurate and all applicable control technology requirements and any voluntary physical or operational limits entered to avoid an otherwise applicable control technology requirement are identified and ensuring that those or equivalent requirements will be maintained under the PAL.
- c. Reviewing any specific or general advance approval scenarios proposed to be included in the PAL permit by the Clean Corporate Citizen. Determining that terms and conditions necessary to ensure the advance approvals will comply with all applicable requirements are included in the proposed permit. Also ensuring that any general advance approvals included in the proposed permit will not include process or process equipment that emits pollutants other than the PAL pollutants.
- d. Ensuring that the PAL will not include any process or process equipment for which emissions are not quantifiable or for which there are no replicable procedures to enforce the PAL.
- e. Determining that the proposed monitoring, recordkeeping, and reporting plan is sufficient to ensure the PAL and any other individual applicable requirements that would be maintained within the PAL, including any requirements that may become applicable in the future due to advance approvals, are enforceable and that the plan is reflected in specific terms and conditions that ensure the practical enforceability of the PAL.
- f. Determining that the proposed plan for periodic review and reopening of the PAL is consistent with the minimum criteria listed in items 5 & 6 of th<u>POLICY</u> Section of this Operational Memorandum and that the plan is reflected in specific terms and conditions that ensure the practical enforceability of the plan.
- g. Reviewing the proposed procedures to ensure that the stationary source is not modified in such a way as to exceed the PAL or cause or contribute to violations of the NAAQS are consistent with the minimum criteria listed in items 7 & 8 of th<u>POLICY</u> Section of this Operational Memorandum. Such review could include dispersion modeling to determine an acceptable minimum stack height or stack height to building height ratio, or review of a proposed modeling plan to be implemented by the Clean Corporate Citizen.
- 4. Permit Section staff will coordinate the PAL review with the appropriate District staff. If a renewable operating permit application is being reviewed simultaneously with the PAL permit application, every reasonable effort will be made to coordinate these reviews and minimize to the extent possible duplicate review and issuance process.
- 5. Permit Section staff will coordinate all formal written communications with the applicant regarding the PAL application in accordance with existing procedures.
- 6. Upon the determination that the information submitted with the application is technically complete and accurate, Permit Section staff will review and modify as required the permit

conditions proposed by the applicant which are necessary to ensure the PAL is enforceable as a practical matter. The terms and conditions of the permit to install shall meet the requirements of Rules 205 and 1415(5). Permit Section staff shall also identify any terms and conditions of the permit that would be rescinded if the stationary source's Clean Corporate Citizen designation is terminated pursuant to Rule 1420.

- 7. Upon agreement with the applicant on the permit terms and conditions, Permit Section staff will provide for the necessary public notice and public comment period, including an opportunity for a public hearing, if requested, consistent with the provisions of Rule 205(1)(b). The MDEQ will not approve a permit to install which includes a PAL unless a draft permit has completed a public participation process as specified in Section 5511(3) of Act 451, including: (1) a 30 day public notice; (2) a copy of the draft permit has been provided to the EPA for review and comment and the EPA has commented that the proposed permit is acceptable to them; and (3) a copy of each final permit to install is provided to the EPA after it is issued.
- 8. After completion of step 6, Permit Section staff will prepare and distribute the final permit approval letter utilizing the standard form letter and condition templates. This letter should also identify any existing permit to install which is being voided because it is being replaced by the new permit. A copy of this letter will be sent to the appropriate District office.

This memorandum is intended to provide guidance to AQD staff to foster consistent application of Part 55 of Act 451 of the Public Acts of 1994, the Natural Resources and Environmental Protection Act and the administrative rules promulgated thereunder. This document is not intended to convey any rights to any parties nor create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

Questions regarding this memorandum should be directed to Bill Presson at 517-373-7091.

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